

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Hutchinson, et al.

Serial No.: 08/747,033

Filed:

For: APPARATUS FOR DEPOSITION OF  
ULTRASOUND ENERGY IN BODY  
TISSUE

Atty. Docket: 092664-004

Group Art Unit:

Examiner:

VERIFIED STATEMENT (DECLARATION)

CLAIMING SMALL ENTITY STATUS

37 CFR 1.9(f) and 1.27(d)

NON-PROFIT ORGANIZATION

I hereby declare that I am an official empowered to act on behalf of the non-profit organization identified below:

NAME OF ORGANIZATION: Brigham and Women's Hospital

ADDRESS OF ORGANIZATION: 75 Francis Street, Boston, Massachusetts 02115

TYPE OF ORGANIZATION:

☒ (x) University or other organization of higher education

☐ ( ) Non-profit scientific or educational organization under a statute of a state of the United States of America

NAME OF STATE: \_\_\_\_\_

CITATION OF STATUTE: \_\_\_\_\_

☐ ( ) Would qualify as tax exempt under the Internal Revenue Service Code (26 USC 501(a) and 501(c) (3) if the organization were located in the United States of America

☐ ( ) Tax exempt under the Internal Revenue Service Code (26 USC 501(a) and 501(c) (3).

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(x) Would qualify as a non-profit scientific or educational organization under a statute of a state of the United States of America

NAME OF STATE: \_\_\_\_\_  
CITATION OF STATUTE: \_\_\_\_\_

I hereby declare that the above-identified non-profit organization qualifies as a non-profit organization as defined in 37 CFR 1.9(e), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code.

I hereby declare that rights under contract or law have been conveyed to and remain with the above-identified non-profit organization with regard to the invention titled:

TITLE: APPARATUS FOR DEPOSITION OF ULTRASOUND ENERGY IN BODY TISSUE

by: Hutchinson, et al.

described in:

(x) the specification filed herewith \_\_\_\_\_  
( ) U.S. Patent Application Serial Number 08/747,033  
Filed November 8, 1996

( ) U.S. Patent Number \_\_\_\_\_  
issued \_\_\_\_\_

If the rights of the above-identified non-profit organization are not exclusive, each individual, concern, or organization having rights to the invention is listed below\* and no rights to the invention are held by any person, other than the inventor(s), who could not qualify as a small business concern under 37 CFR 1.9(d) or a non-profit organization under 37 CFR 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention, averring to their status as small entities. (37 CFR 1.27).

FULL NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

( ) INDIVIDUAL ( ) SMALL BUSINESS CONCERN ( ) NON-PROFIT ORGANIZATION

FULL NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

( ) INDIVIDUAL ( ) SMALL BUSINESS CONCERN ( ) NON-PROFIT ORGANIZATION

FULL NAME: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_

( ) INDIVIDUAL ( ) SMALL BUSINESS CONCERN ( ) NON-PROFIT ORGANIZATION

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I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: Brian Hicks **BRIAN N. HICKS**  
TITLE IN ORGANIZATION: Acting Director  
ADDRESS OF PERSON SIGNING: 75 Francis Street, Boston, Mass. 02111 **Ventures Department**

SIGNATURE: Brian Hicks DATE: 1/31/97

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**DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION**

As a below named inventor, we hereby declare that:

Our residences, post office addresses and citizenships are as stated below next to our names,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**APPARATUS FOR DEPOSITION OF ULTRASOUND ENERGY IN BODY TISSUE**

the specification of which  
(check one)

  x   is attached hereto and

  x   was filed on November 8, 1996  
as Application Serial No. 08/747,033  
or Express Mail No. \_\_\_\_\_  
and was amended on \_\_\_\_\_  
(if applicable)

We do not know and do not believe that the subject matter of this application was ever known or used in the United States before our invention thereof or patented or described in any printed publication in any country before our invention thereof or more than one year prior to the date of this application, and that said subject matter has not been patented or made the subject of an issued inventor's certificate in any country foreign to the United States on an application filed by us or our legal representative or assign more than twelve months prior to the date of this application; that we acknowledge our duty to disclose information of which we are aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by us or our representatives or assigns in any country foreign to the United States, except those identified below, and that we have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

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## PRIORITY CLAIM

We hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by us on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

Check one:

☐ no such applications have been filed.

☐ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>
			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION


CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

We hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application. As to subject matter of this application which is common to our earlier United States application, if any, described below, we do not believe that the same was ever known or used in the United States before our invention thereof or patented or described in any printed publication in any country before our invention thereof or more than one year prior to said earlier application, or in public use or on sale in the United States more than one year prior to said earlier application, that the said common subject matter has not been patented or made the subject of an inventor's certificate issued before the date of said earlier application in any country foreign to the United States on an application, filed by us or our legal representatives or assigns more than twelve months prior to said application and that no application for patent or inventor's certificate on said subject matter has been filed by us or our representatives or assigns in any country foreign to the United States except those identified herein.

<u>60/006,413</u> (Application Serial No.)	<u>November 9, 1995</u> (Filed)	<u>pending</u> (patented,pending, abandoned)
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## POWER OF ATTORNEY

As the named inventors, we hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

David J. Powsner	Reg. No. 31,868
Sam Pasternack	Reg. No. 29,576
Mary Rose Scozzafava	Reg. No. 36,268
Brenda H. Jarrell	Reg. No. 39,223
Mary Raynor Jimenez	Reg. No. 37,219

Send Correspondence to:

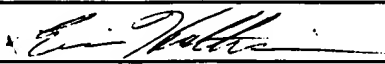
CHOATE, HALL & STEWART, Exchange Place, 53 State Street, Boston, MA 02109-2891

Direct Telephone Calls to: (name and telephone number)

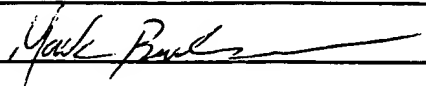
David J. Powsner, Esq., Tel.: (617) 248-4030

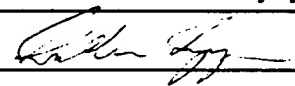
Wherefore we petition that letters patent be granted to us for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe our name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor	Erin Hutchinson
Inventor's signature	
Date	2/10/97
Residence of first inventor	386 The Riverway #2, Boston, MA 02115
Citizenship	U.S.
Post Office address (if different)	same

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Full name of second inventor	Mark Buchanan
Inventor's signature	
Date	2/20/97
Residence of first inventor	19 Upland Road, Burlington, MA 01803
Citizenship	U.S.
Post Office address (if different)	same

Full name of third inventor	Kullervo Hynynen
Inventor's signature	
Date	2/20/97
Residence of first inventor	36 Oriole Road, Medfield, MA 02052
Citizenship	Finland
Post Office address (if different)	same

ds1/302856



Express Mail No. **EK555670**  
Date of Deposit: **June 13, 2000**

Attorney Docket No. 18989-012  
(BWH-12)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: **Hutchinson *et al.***  
ASSIGNEE: **Brigham and Women's Hospital**  
SERIAL NUMBER: **08/747,033** EXAMINER: **F. Jaworski**  
FILING DATE: **November 8, 1996** ART UNIT: **3737**  
FOR: **APPARATUS FOR DEPOSITION OF ULTRASOUND ENERGY IN  
BODY TISSUE**

**Boston, Massachusetts**

**Assistant Commissioner for Patents  
Washington, D.C. 20231**

**REVOCATION BY ASSIGNEE AND NEW POWER OF ATTORNEY**

BRIGHAM AND WOMEN'S HOSPITAL, a Massachusetts corporation and owner of the above-identified United States patent application 08/747,033, filed November 8, 1996, in which the assignment was recorded on March 19, 1997, at Reel 8408/Frame 0181, hereby revokes any and all former powers of attorney and appoints:

<b>Attorney or Agent</b>	<b>Registration No.</b>	<b>Attorney or Agent</b>	<b>Registration No.</b>
David B. Bernstein	32,112	Barry J. Marenberg	40,715
David F. Crosby	36,400	William A. Marino	44,219
James G. Cullem	43,569	Leslie Meyer-Leon	37,381
Brett N. Dorny	35,860	A. Jason Mirabito	28,161
Marianne Downing	42,870	Michel Morency	Limited Recognition
Ivor R. Elrifi	39,529	Carol H. Peters	45,020
Heidi A. Erlacher	P-45,409	John T. Prince	43,091
John A. Harre	37,345	Mike Renaud	44,299
Shane Hunter	41,858	Brian Rosenbloom	41,276
David E. Johnson	41,874	Thomas M. Sullivan	39,392
Christina Karnakis	P-45,899	Howard Susser	33,556
Robert Klauzinski	42,742	Shelby Walker	45,192
Kristin E. Konzak	44,848	Martin M. Zoltick	34,745
Cynthia Kozakiewicz	42,764		

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APPLICANTS: Huto n et al.  
SERIAL NUMBER: 08/74 33

all of MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO PC, One Financial Center, Boston, Massachusetts 02111, as Applicants' attorneys with full power of substitution and revocation to take any and all action necessary with regard to the above-identified patent.

**Send Correspondence To:**

Ivor R. Elrifi  
Mintz Levin  
One Financial Center  
Boston, MA 02111

**Direct Telephone Calls To:**

Ivor R. Elrifi  
(617) 542-6000

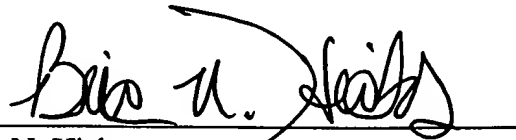
BRIGHAM AND WOMEN'S HOSPITAL certifies under 37 C.F.R. § 3.73(b) that it is the Assignee of the entire right, title and interest in the patent identified above by virtue of assignments of the above identified patent.

I, the undersigned, am empowered to act on behalf of the Assignee. Acting on behalf of the Assignee, I have reviewed all the documents in the chain of title of the patent identified above and, to the best of my knowledge and belief, title is in the Assignee identified above.

I, the undersigned, hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the patent.

Please charge any fee or any fee deficiency occasioned by this document to Deposit Account No. 50-0311 (Reference No. 18989-012).

Respectfully submitted,



Brian N. Hicks

THE BRIGHAM AND WOMEN'S HOSPITAL, INC.  
75 Francis Street  
Boston, Massachusetts 02115

Date: 5/1/00

TRADOC5:1301371.1(RW57011.DOC)



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KNT  
UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
**DOCKETED**

JUNE 16, 1997

PTAS

CHOATE, HALL & STEWART  
DAVID J. POWSNER, ESQ.  
EXCHANGE PLACE  
53 STATE STREET  
BOSTON, MA 02109



\*100382405A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/19/1997

REEL/FRAME: 8408/0181

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HUTCHINSON, ERIN

DOC DATE: 02/10/1997

ASSIGNOR:

BUCHANAN, MARK

DOC DATE: 02/20/1997

ASSIGNOR:

HYNYNEN, KULLERVO

DOC DATE: 02/20/1997

ASSIGNEE:

BRIGHAM & WOMEN'S HOSPITAL  
75 FRANCIS STREET  
BOSTON, MASSACHUSETTS 02115

SERIAL NUMBER: 08747033

FILING DATE: 11/08/1996

PATENT NUMBER:

ISSUE DATE:

jc825 U.S. PTO  
09/692294  
10/19/00

8408/0181 PAGE 2

DIANE RUSSELE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

04-02-1997

1 SHEET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Honorable Commissioner of

100382405

attached original documents or copies thereof.

RECEIPT ACCT'G. DIV.

10825 U.S. PTO

09/692294

10/19/00

1. Name of conveying party(ies):  
Erin Hutchinson  
Mark Buchanan  
Kullervo Hynynen  
Additional name(s) of conveying party(ies) attached?  
☐ Yes ☒ No  
Nature of conveyance:  
Assignment ☐ Merger  
Security Agreement ☐ Change of Name  
Other \_\_\_\_\_  
Execution Date: February 20, 1997

2. Name and address of receiving party(ies)  
Name: Brigham & Women's Hospital  
Internal Address:  
Street Address: 75 Francis Street  
City: Boston State: MA ZIP: 02115  
Additional name(s) & address(es) attached? ☐ Yes ☒ No

Application number(s) or patent number(s):  
If this document is being filed together with a new application, the execution date of the application is:  
A. Patent Application No.(s)  
08/747,033  
B. Patent No.(s)  
Additional numbers attached? ☐ Yes ☒ No

Name and address of party to whom correspondence concerning document should be mailed:  
Name: David J. Powsner, Esq.  
Internal Address: Choate, Hall & Stewart  
Street Address: Exchange Place  
53 State Street  
City: Boston State: MA ZIP: 02109  
6. Total number of applications and patents involved: 1  
7. Total fee (37 CFR 3.41) ..... \$ 40.00  
☒ Enclosed  
☐ Authorized to be charged to deposit account  
8. Deposit account number: 03-1721  
(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.  
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.  
David J. Powsner  
Name of Person Signing  
Reg. No. 31,868  
Signature  
Date  
March 12, 1997  
Total number of pages including cover sheet, attachments, and document: 1 581 40.00 CK

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks, Box Assignments  
Washington, D.C. 20231

## ASSIGNMENT

WHEREAS, Erin Hutchinson, of Boston, Massachusetts, Mark Buchanan, of Burlington, Massachusetts and Kullervo Hynynen, of Medfield, Massachusetts, having invented certain new and useful improvements in **APPARATUS FOR DEPOSITION OF ULTRASOUND ENERGY IN BODY TISSUE** for which we have made application for United States Letters Patent, said application filed with the United States Patent Office on November 8, 1996, Application Serial No. 08/747,033;

WHEREAS, BRIGHAM & WOMEN'S HOSPITAL, a Massachusetts corporation, having a place of business at 75 Francis Street, Boston, Massachusetts, and its successors and assigns (collectively hereinafter called "ASSIGNEE"), is desirous of acquiring our entire right, title and interest in and to the invention, and in and to the said application and any Letters Patent that may issue thereon;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledge, we do hereby sell assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive right, title and interest in and to said invention and in and to said application and all patents which may be granted therefore, and all divisions, reissues, substitutions, continuations, continuations-in-part and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as my interest is concerned, to the said ASSIGNEE of my entire right, title and interest.

We also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world, including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention, and all rights to register said invention in appropriate registries; and we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

We hereby further agree that we will communicate to said ASSIGNEE, or to its successors, assigns and legal representative, any facts known to me respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

IN WITNESS WHEREOF, I hereto set my hand and seal at Flagstaff.

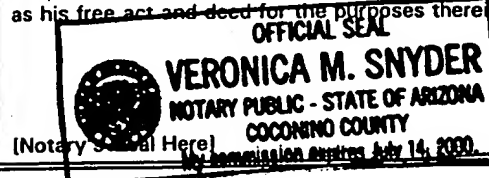
X Arizona this X 10<sup>th</sup> day of X February, 1997.

STATE OF Arizona  
COUNTY OF Cochise

Erin Hutchinson  
Erin Hutchinson

SS.

Before me this 10 day of February, 1997, personally appeared Erin Hutchinson known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.



Veronica M. Snyder  
NOTARY PUBLIC

My Commission Expires: July 14 2000

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,

\_\_\_\_\_ this 20<sup>th</sup> day of February, 1997.

STATE OF Massachusetts  
COUNTY OF Suffolk

Mark Buchanan  
Mark Buchanan

SS.

Before me this 20<sup>th</sup> day of February, 1997, personally appeared MARK BUCHANAN known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

(Notary's Seal Here)

Claren Dyler  
NOTARY PUBLIC

My Commission Expires:

exp 12/99

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,

X \_\_\_\_\_ this 20<sup>th</sup> day of February, 1997.

STATE OF Mass

COUNTY OF Suffolk

Kullervo Hynynen  
Kullervo Hynynen

SS.

Before me this 21<sup>st</sup> day of February, 1997, personally appeared KULLERVO HYNYNEN known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Ellen Dykstra  
.....  
NOTARY PUBLIC

[Notary's Seal Here]

My Commission Expires: 12/9/98